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A  
T A B L E  
O F  
A F F I N I T I E S  
B E T W E E N  
S E V E R A L S U B S T A N C E S :

By MR. <sup>E. F.</sup> G E O F F R O Y. *K*

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A  
T A B L E  
O F T H E  
S O L U T I O N S O F B O D I E S :  
W I T H  
S U B S T A N C E S N O T S O L U B L E B Y  
T H E S E B O D I E S :  
B Y M R. G E L L E R T .



VERAL STANCES:

Mr. George

XXXXXX

XXXXXX

XXXXXX

THE

SOLUTIONS OF

WITH

BY

THE

OF

TABLE of AFFINITIES



A  
T A B L E

OF



A F F I N I T I E S.



# TABLE OF AFFINITIES.

| 1.<br><i>Acid<br/>Spirits</i> | 2.<br><i>Marine<br/>Acid</i> | 3.<br><i>Nitrous<br/>Acid</i> | 4.<br><i>Vitriolic<br/>Acid</i> |
|-------------------------------|------------------------------|-------------------------------|---------------------------------|
| Fixed<br>Alkali               | Tin                          | Iron                          | Phlogiston                      |
| Volatile<br>Alkali            | Regulus of<br>Antimony       | Copper                        | Fixed<br>Alkali                 |
| Absorbent<br>Earths           | Copper                       | Lead                          | Volatile<br>Alkali              |
| Metallic<br>Substances        | Silver                       | Mercury                       | Absorbent<br>Earths             |
|                               | Mercury                      | Silver                        | Iron                            |
|                               |                              |                               | Copper                          |
|                               |                              |                               | Silver                          |
|                               | Gold                         |                               |                                 |

# TABLE OF AFFINITIES. 2

| 5.<br><i>Absorbent<br/>Earth</i> | 6.<br><i>Fixed<br/>Alkali</i> | 7.<br><i>Volatile<br/>Alkali</i> | 8.<br><i>Metallic<br/>Substances</i> |
|----------------------------------|-------------------------------|----------------------------------|--------------------------------------|
| Vitriolic<br>Acid                | Vitriolic<br>Acid             | Vitriolic<br>Acid                | Marine<br>Acid                       |
| Nitrous<br>Acid                  | Nitrous<br>Acid               | Nitrous<br>Acid                  | Vitriolic<br>Acid                    |
| Marine<br>Acid                   | Marine<br>Acid                | Marine<br>Acid                   | Nitrous<br>Acid                      |
|                                  | Acetous<br>Acid               |                                  | Acetous<br>Acid                      |
|                                  | Sulphur                       |                                  |                                      |

### 3 TABLE OF AFFINITIES.

| 9.<br><i>Sulphur</i>   | 10.<br><i>Mercury</i>  | 11.<br><i>Lead</i> | 12.<br><i>Copper</i>      |
|------------------------|------------------------|--------------------|---------------------------|
| Fixed<br>Alkali        | Gold                   | Silver             | Mercury                   |
| Iron                   | Silver                 | Copper             | Lapis<br>Calami-<br>naris |
| Copper                 | Lead                   |                    |                           |
| Lead                   | Copper                 |                    |                           |
| Silver                 | Zinc                   |                    |                           |
| Regulus of<br>Antimony | Regulus of<br>Antimony |                    |                           |
| Mercury                |                        |                    |                           |
| Gold                   |                        |                    |                           |

# TABLE OF AFFINITIES. 4

| 13.<br><i>Silver</i> | 14.<br><i>Iron</i>       | <i>Regulus of Antimony</i> | <i>Water</i>   |
|----------------------|--------------------------|----------------------------|----------------|
| Lead                 | Regulus of Antimony      | Iron                       | Spirit of Wine |
| Copper               | Silver<br>Copper<br>Lead | Silver<br>Copper<br>Lead   | Neutral Salts  |

TABLE OF AFFINITIES.

TABLE OF THE SOLUTIONS OF BODIES.



A

T A B L E

OF THE

SOLUTIONS OF BODIES.



# TABLE OF THE SOLUTIONS OF BODIES.

| 1.<br><i>Siliceous<br/>Earth</i>                      | 2.<br><i>Fluors</i>                             | 3.<br><i>Clay</i>                                                           | 4.<br><i>Earth<br/>Gypseous</i>                                 |
|-------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------|
| Hepar of<br>Sulphur<br>Fixed<br>Alkali<br>Borax       | Hepar of<br>Sulphur<br>Fixed<br>Alkali<br>Borax | Vitriolic<br>Acid partly<br>Hepar of<br>Sulphur<br>Fixed<br>Alkali<br>Borax | Acids partly<br>Hepar of<br>Sulphur<br>Fixed<br>Alkali<br>Borax |
| Calx of<br>Lead<br>Calx of<br>Antimony                | Calx of<br>Lead<br>Calx of<br>Antimony<br>Clay  | Calx of<br>Lead<br>Calx of<br>Antimony                                      | Calx of<br>Lead<br>Calx of<br>Antimony                          |
|                                                       | Earth<br>Calcareous<br>Earth<br>Gypseous        | Gypseous<br>Earth<br>Calcareous<br>Earth                                    |                                                                 |
| Bodies not soluble by that at the top of each column. |                                                 |                                                                             |                                                                 |
|                                                       | Siliceous<br>Earth                              | Siliceous<br>Earth                                                          | Siliceous<br>Earth<br>Calcareous<br>Earth                       |

TABLE OF THE SOLUTIONS OF BODIES. 2

| 5.<br><i>Earth<br/>Calcareous</i>                     | 6.<br><i>Fixed<br/>Alkali</i>                                      | 7.<br><i>Volatile<br/>Alkali</i>         | 8.<br><i>Acetous<br/>Acid</i>    |
|-------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------|----------------------------------|
| Vitriolic Acid                                        | Phlogiston                                                         | Phlogiston                               | Phlogiston                       |
| Nitrous Acid                                          | Vitriolic Acid                                                     | Vitriolic Acid                           | Zinc                             |
| Marine Acid                                           | Nitrous Acid                                                       | Nitrous Acid                             | Iron                             |
| Acetous Acid                                          | Marine Acid                                                        | Marine Acid                              | Copper                           |
| Hepar of Sulphur                                      | Vegetable Acids                                                    | Acetous Acid                             | Lead                             |
| Fixed Alkali                                          | Zinc                                                               | Zinc                                     | Bismuth                          |
| Borax                                                 | Iron                                                               | Iron                                     |                                  |
| Calx of Lead                                          | Copper                                                             | Copper                                   |                                  |
| Calx of Antimony                                      | Lead<br>Tin<br>Regulus of Antimony<br>Cobalt<br>Arsenic<br>Bismuth | Bismuth<br>Mercury<br>Silver<br><br>Gold |                                  |
| Bodies not soluble by that at the top of each column. |                                                                    |                                          |                                  |
| Siliceous Earth                                       | Gold<br><br>Silver                                                 |                                          | Gold<br>Silver<br>Tin<br>Mercury |

### 3 TABLE OF THE SOLUTIONS OF BODIES.

| 9.<br><i>Marine<br/>Acid</i>                          | 10.<br><i>Nitrous<br/>Acid</i> | 11.<br><i>Vitriolic<br/>Acid</i> | 12.<br><i>Aqua<br/>Regia</i> |
|-------------------------------------------------------|--------------------------------|----------------------------------|------------------------------|
| Phlogiston                                            | Phlogiston                     | Phlogiston                       | Phlogiston                   |
| Zinc                                                  | Zinc                           | Zinc                             | Zinc                         |
| Iron                                                  | Iron                           | Iron                             | Iron                         |
| Copper                                                | Cobalt                         | Copper                           | Cobalt                       |
| Tin                                                   | Copper                         | Silver                           | Copper                       |
| Lead                                                  | Bismuth                        | Tin                              | Tin                          |
| Bismuth                                               | Lead                           | Lead                             | Arsenic                      |
| Regulus of<br>Antimony                                | Mercury                        | Mercury                          | Bismuth                      |
| Mercury                                               | Regulus of<br>Antimony         | Bismuth                          | Mercury                      |
| Arsenic                                               | Silver                         | Regulus of<br>Antimony           | Lead                         |
|                                                       | Arsenic                        | Arsenic                          | Regulus of<br>Antimony       |
|                                                       | Tin partly                     |                                  | Gold                         |
| Bodies not soluble by that at the top of each column. |                                |                                  |                              |
| Gold                                                  | Gold                           | Gold                             | Silver                       |
| Silver<br>(partly by the<br>dry way)                  |                                |                                  |                              |

TABLE OF THE SOLUTIONS OF BODIES. 4

| 13.<br><i>Nitre</i>                                   | 14.<br><i>Sulphur</i>  | 15.<br><i>Hepar of<br/>Sulphur</i> | 16.<br><i>Cobalt</i>   |
|-------------------------------------------------------|------------------------|------------------------------------|------------------------|
| Phlogiston                                            | Iron                   | Gold                               | Copper                 |
| Zinc                                                  | Copper                 | Silver                             | Iron                   |
| Iron                                                  | Tin                    | Iron                               | Tin                    |
| Copper                                                | Lead                   | Copper                             | Zinc                   |
| Arsenic                                               | Silver                 | Lead                               | Regulus of<br>Antimony |
| Lead                                                  | Bismuth                | Tin                                | Bismuth                |
| Tin                                                   | Regulus of<br>Antimony | Regulus of<br>Antimony             | Lead                   |
| Regulus of<br>Antimony                                | Mercury                | Bismuth                            | Silver                 |
| Cobalt                                                | Arsenic                | Zinc                               | Arsenic<br>(partly)    |
| Bismuth                                               | Cobalt                 | Cobalt                             |                        |
| Bodies not soluble by that at the top of each column. |                        |                                    |                        |
| Gold                                                  | Gold                   |                                    |                        |
| Silver                                                | Zinc                   |                                    |                        |

# 5. TABLE OF THE SOLUTIONS OF BODIES.

| 17.<br><i>Arsenic</i>                                 | 18.<br><i>Regulus of Antimony</i> | 19.<br><i>Glass of Antimony</i> | 20.<br><i>Bismuth</i> |
|-------------------------------------------------------|-----------------------------------|---------------------------------|-----------------------|
| Zinc                                                  | Zinc                              | Zinc                            | Iron                  |
| Iron                                                  | Iron                              | Copper                          | Copper                |
| Copper                                                | Copper                            | Tin                             | Tin                   |
| Tin                                                   | Tin                               | Lead                            | Lead                  |
| Lead                                                  | Lead                              | Iron                            | Silver                |
| Silver                                                | Silver                            | Silver                          | Gold                  |
| Gold                                                  | Bismuth                           |                                 |                       |
| Regulus of Antimony                                   | Gold                              |                                 |                       |
| Bodies not soluble by that at the top of each column. |                                   |                                 |                       |
| Bismuth                                               |                                   | Bismuth                         | Zinc                  |

# TABLE OF THE SOLUTIONS OF BODIES. 6

| 21.<br><i>Zinc</i>                                    | 22.<br><i>Lead</i> | 23.<br><i>Tin</i> | 24.<br><i>Iron</i> |
|-------------------------------------------------------|--------------------|-------------------|--------------------|
| Copper                                                | Silver             | Iron              | Gold               |
| Iron                                                  | Gold               | Copper            | Silver             |
| Silver                                                | Tin                | Silver            | Copper             |
| Gold                                                  | Copper             | Gold              |                    |
| Tin                                                   |                    |                   |                    |
| Lead<br>( <i>partly</i> )                             |                    |                   |                    |
| Bodies not soluble by that at the top of each column. |                    |                   |                    |
|                                                       | Iron               |                   |                    |

# 7 TABLE OF THE SOLUTIONS OF BODIES.

| 25.<br><i>Copper</i> | 26.<br><i>Silver</i> | 27.<br><i>Mercury</i> | 28.<br><i>Glass</i>   |
|----------------------|----------------------|-----------------------|-----------------------|
| Gold                 | Gold                 | Gold                  | Calx of Lead          |
| Silver               |                      | Silver                | Calx of Cobalt        |
|                      |                      | Bismuth               | Calx of R. of Antimo. |
|                      |                      | Zinc                  | Calx of Gold          |
|                      |                      | Tin                   | Calx of Silver        |
|                      |                      | Lead                  | Calx of Copper        |
|                      |                      | Copper                | Calx of Iron          |
|                      |                      | Regulus of Antimony   | Calx of Bismuth       |
|                      |                      |                       | Calx of Zinc          |
|                      |                      |                       | Calx of Mercury       |

Bodies not soluble by that at the top of each column.

|           |        |
|-----------|--------|
|           | Iron   |
| 12 FEB 66 | Cobalt |

